## **ABSTRACT**

The invention provides collections of transgenic animals and vectors for producing transgenic animals, which transgenic animals and vectors have a transgene comprising sequences encoding a detectable or selectable marker, the expression of which marker is under the control of regulatory sequences from an endogenous gene such that when the transgene is present in the genome of the transgenic animal, the detectable or selectable marker has the same expression pattern as the endogenous gene. Such transgenic animals can then be used to detect, isolate and/or select pure populations of cells having a particular functional characteristic. The isolated cells have uses in gene discovery, target identification and validation, genomic and proteomic analysis, etc.

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